



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

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MAY 31 1968

Mr. John T. Conway
Executive Director
Joint Committee on Atomic Energy
Congress of the United States

Dear Mr. Conway:

The following summarizes the current status on the incidence of thyroid disorders among the people of Rongelap Island who were exposed to fallout on March 1, 1954. Dr. Conard, Medical Department, Brookhaven National Laboratory, conducted the most recent survey in March 1968.

The results of the 1967 survey were reported to you by letter dated May 12, 1967. At that time we indicated that 17 people had developed thyroid nodules, 11 of which had been treated surgically.

In the most recent survey, 2 more cases of thyroid nodules in children who were exposed to fallout on Rongelap when they were less than ten years of age were found. This brings the total number of cases of thyroid abnormalities in the 67 living Rongelapese to 21; of the 19 children in the more heavily exposed group who were less than 10 years of age at time of exposure, 17, or 90% have developed thyroid abnormalities.

DOE ARCHIVES

It was decided that 4 cases should be brought to the Brookhaven National Laboratory for complete medical evaluation and, if necessary, surgery. Preparations for their transportation and reception are now taking place. Three are people having thyroid nodules which had not responded to thyroid hormone therapy. The fourth is a 29-year-old woman with an unidentified tumor in the neck lateral to the gland. In the past, 11 Marshallese have undergone surgery; one woman exposed as an adult was found to have cancer of the thyroid, while 10 who were exposed when less than 10 years of age had benign adenomatous goiters.

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Mr. John T. Conway

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The incidence of thyroid problems in this population is tabulated on the enclosed sheet.

We will keep you informed of the progress of these studies.

Sincerely yours,

(Signed) S. G. English

S. G. English
Assistant General Manager for
Research and Development

Enclosure:
Thyroid Nodules Including Hypothyroidism
in the Marshallese Populations as of
March 1968

bcc: Chairman Seaborg (2)
Commissioner Ramey
Commissioner Tape
Commissioner Johnson
Cong. Rel. (2)
GM (2)
Secy (2)
AGMRD
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DOE ARCHIVES

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Thyroid Nodules Including Hypothyroidism in the
Marshall Islands Populations as of March 1968

| <u>Persons Exposed on</u> | <u>Age at Exposure</u> | <u>Whole Body Gamma Dose (rads)</u> | <u>Estimated Added Thyroid Dose from I*, (rads)</u> | <u>No. in Group</u> | <u>No. and Percent with Nodules</u> |
|-------------------------------|----------------------------|---|---|-------------------------|---|
| Rongelap Island | ≤10 | 175 | 700 - 1400 | 19 | 17 (90%) |
| | >10 | 175 | 160 | 36 | 2 (5.5%) |
| Ailingnae Island | ≤10 | 69 | 275 - 550 | 6 | 0 |
| | >10 | 69 | 55 | 8 | 1 (12.5%) |
| Utirik Island | ≤10 | 14 | 55 - 110 | 40 | 0 |
| | >10 | 14 | 15 | 59 | 2 (3.4%) |
| Control Marshallese | ≤10 | 61 | 0 | 0 | 0 |
| | >10 | 133 | 0 | 0 | 3 (2.3%) |

DOE ARCHIVES

* Estimates of the doses to the thyroids of the Rongelapese were recomputed by R. James and J. Gofman, UCRL #12273. December, 1964. Estimates of the thyroid doses of the Ailingnae and Utirik people were by proportionality to the respective whole body gamma doses.